

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-4. (Canceled)

5. (Currently Amended) ~~The An~~ information recording medium ~~according to claim 3,~~
storing data which can be accessed from an accessing device, comprising:

a storage device operable to store data and having plural areas respectively managed by
independent file systems;

an area information storage operable to store information about size and position of each
area of the storage device;

a host interface operable to receive a command for setting a size of each area of the
storage device from the accessing device;

an area size setter operable to set size and position of each area of the storage device
based on a predetermined setting condition according to the command received from the
accessing device; and

an authentication controller operable to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the
accessing device only when authentication by the authentication controller is successful, and a
non-authentication area which allows access from the accessing device regardless of a result of
the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein information about the predetermined setting condition comprises a ratio of a size of an area included in the non-authentication area to the size of the corresponding area included in the authentication area, is stored as the setting condition,

wherein the host interface receives the size of one area in the non-authentication area or authentication area from the accessing device, and

wherein the area size setting section setter determines the size of each area in the non-authentication area and authentication area on the basis of the received size of one area and the ratio, and sets the information to be stored in the area information storage section on the basis of the received value size and determined value: size.

6. (Currently Amended) The An information recording medium according to claim 3, storing data which can be accessed from an accessing device, comprising:

a storage device operable to store data and having plural areas respectively managed by independent file systems;

an area information storage operable to store information about size and position of each area of the storage device;

a host interface operable to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter operable to set size and position of each area of the storage device based on a predetermined setting condition according to the command received from the

accessing device; and

an authentication controller operable to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein ~~information about the predetermined setting condition~~ comprises a ratio of a size of an area included in the non-authentication area to a size of the corresponding area included in the authentication area, ~~is stored as the setting condition,~~

wherein the host interface receives the size of each area in the non-authentication area or the authentication area from the accessing device, and

wherein the area size ~~setting-section setter~~ determines the size of each area in the non-authentication area and the authentication area on the basis of the received size of each area and the ratio, and sets the information to be stored in the area information storage section on the basis of the received ~~value~~ size and determined ~~value-~~ size.

7. (Currently Amended) The ~~An~~ information recording medium ~~according to claim 3,~~ storing data which can be accessed from an accessing device, comprising:

a storage device operable to store data and having plural areas respectively managed by independent file systems;

an area information storage operable to store information about size and position of each area of the storage device;

a host interface operable to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter operable to set size and position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

an authentication controller operable to authenticate the accessing device,

wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the predetermined setting condition is comprises a composition ratio of each area in the non-authentication area or the authentication area,

wherein the host interface receives the size sizes of each area respective areas in one of the non-authentication area and the authentication area from the accessing device, and

wherein the area size ~~setting section~~ setter calculates the composition ratio from the received area size, sizes of respective areas, determines the size sizes of each area respective areas in the an other of the non-authentication area and the authentication area on the basis of the calculated composition ratio, and sets the information to be stored in the area information storage

section according to the received ~~value~~ sizes and determined ~~value~~, sizes.

8. (Currently Amended) The An information recording medium according to claim 3, storing data which can be accessed from an accessing device, comprising:

a storage device operable to store data and having plural areas respectively managed by independent file systems;

an area information storage operable to store information about size and position of each area of the storage device;

a host interface operable to receive a command for setting a size of each area of the storage device from the accessing device;

an area size setter operable to set a size and a position of each area of the storage device based on a predetermined setting condition according to the command received from the accessing device; and

an authentication controller operable to authenticate the accessing device, wherein the storage device has an authentication area which allows access from the accessing device only when authentication by the authentication controller is successful, and a non-authentication area which allows access from the accessing device regardless of a result of the authentication by the authentication controller,

wherein the non-authentication area and authentication area individually have plural areas, and each area in the non-authentication area has a corresponding area in the authentication area,

wherein the area information storage ~~section~~ stores plural combinations of sizes of areas included in the non-authentication area and the authentication area,

wherein the host interface receives ~~[[a]]~~ specifying information indicating one combination, from the accessing device, and

wherein the area size ~~setting-section~~ setter selects the one combination from the plural combinations stored in the area information storage ~~section~~ according to the received specifying information, and sets the size of each area in the non-authentication area and authentication area according to the selected combination.

9. (Canceled).

10. (Currently Amended) The information recording medium according to claim ~~[[1]]~~ 5, wherein the area size ~~setting-section~~ setter allows only a discrete value for ~~an area~~ the size that ~~can be set by received from~~ the accessing device.

11. (Currently Amended) The information recording medium according to claim ~~[[1]]~~ 5, wherein the area size ~~setting-section~~ setter sets the size of each area of the storage device to be larger than ~~the~~ a total size of ~~bad~~ inaccessible blocks, which is calculated by ~~the~~ an entire size or each area size of the storage device and a rate of ~~good~~ accessible blocks.

12. (Currently Amended) The information recording medium according to claim ~~[[3]]~~ 5, wherein the size of m areas included in the authentication area, and the size of n areas included in the non-authentication area (m and n are integers of 0 or more, $m+n \geq 2$) are fixed size.

13-15. (Canceled).

16. (Currently Amended) ~~The An~~ accessing device according to claim 13, for writing and reading data to and from an information recording medium which stores data and has plural areas in which data is managed by independent file systems, wherein, when the information recording medium has having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, result, the non-authentication area and authentication area respectively having plural areas, respectively, the information recording medium stores further storing information about a ratio of a size of an area included in the non-authentication area to a size of the a corresponding area included in the authentication area, is stored as the setting condition to set each size of the plural areas, the accessing device comprising:

a slot operable to load the information recording medium; and

a file system controller operable to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set a size of each area in the information recording medium, and specifies the size of area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller specifies the transmits a size of one area in either one of the non-authentication area and the authentication area, to the information recording medium.

17. (Currently Amended) ~~The An~~ accessing device according to claim 13, for writing and reading data to and from an information recording medium which stores data and has plural areas in which data is managed by independent file systems, wherein, when the information recording

medium ~~has~~ having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, result, the non-authentication area and authentication area respectively having plural areas, respectively, the information recording medium stores further storing information about a ratio of a size of an area included in the non-authentication area to a size of the a corresponding area included in the authentication area, ~~is stored as the a~~ setting condition to set each size of the plural areas in the information recording medium, the accessing device comprising:

a slot operable to load the information recording medium; and

a file system controller operable to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller ~~specifies~~ transmits the size of each area in either one of the non-authentication area and authentication area, to the information recording medium.

18. (Currently Amended) ~~The An~~ An accessing device ~~according to claim 13, for writing and reading data to and from an information recording medium which stores data and has plural areas in which data is managed by independent file systems, wherein, when~~ the information recording medium ~~has~~ having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, result, the non-authentication area and authentication area respectively having

plural areas, the information recording medium setting respectively, the setting condition to set each size of the plural areas in the information recording medium is by using a setting condition, which is a composition ratio of each area in the non-authentication area or the authentication area, the accessing device comprising:

a slot operable to load the information recording medium; and

a file system controller operable to control the file systems established on the information recording medium loaded in the slot,

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller specifies transmits the size of each area in either one of the non-authentication area and the authentication area, to the information recording medium.

19. (Currently Amended) The An accessing device according to claim 13, for writing and reading data to and from an information recording medium which stores data and has plural areas in which data is managed by independent file systems, wherein, when the information recording medium has having an authentication area which allows access only when authentication is successful and a non-authentication area which allows access regardless of a result of the authentication, result, and when the non-authentication area and authentication area have respectively having plural areas, respectively and the information recording medium further storing plural combinations of size sizes of each area of areas in the non-authentication area and authentication area are stored, the accessing device comprising:

a slot operable to load the information recording medium; and

a file system controller operable to control the file systems established on the information recording medium loaded in the slot;

wherein the file system controller transmits a command for requesting area size setting to the information recording medium to set the size of each area in the information recording medium, and, in order to set the size of each area of the information recording medium, the file system controller transmits information for selecting one combination from the plural combinations stored in the information recording medium, to the information recording medium.

20. (Canceled).

21. (Currently Amended) The accessing device according to claim 13, 16, wherein the file system controller ~~specifies~~ transmits only a discrete value ~~only~~ for the size of an area ~~that can be~~ to be specified for setting the size of each area of information recording medium.

22. (Currently Amended) The accessing device according to claim 13, 16, wherein the file system controller sets the area size of the one area to be specified transmitted for setting each area of the information recording medium to be larger than ~~the~~ a total size of bad inaccessible blocks, which is calculated by ~~the~~ an entire size of the information recording medium or the size of each area in the information recording medium and a rate of good accessible blocks.

23-25. (Canceled).

26. (Currently Amended) ~~The~~ An area setting method ~~according to claim 23,~~ of an

information recording medium having plural areas storing data, which are managed by mutually independent file systems, wherein the information recording medium has an authentication area which allows access by the an accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, result, and the non-authentication area and authentication area have plural areas respectively, and

the area setting method includes: comprising:

storing a size of area in the non-authentication area and information about the a ratio of a size of the area in the non-authentication area to a size of the corresponding area in the authentication area, as a setting condition;

receiving, from outside of the information recording medium, a command for requesting setting of a size of each area in the information recording medium, and a the size of one area in one of the non-authentication area and the authentication area;

setting a size of each area in the information recording medium based on the setting condition, according to the received command, the setting comprising:

determining the a size of each area of the non-authentication area and the authentication area on the basis of the received size of one area and the ratio; and

setting the size of each area of the information recording medium on the basis of the received value size and determined value, size.

27. (Currently Amended) The An area setting method according to claim 23, of an information recording medium having plural areas storing data, which are managed by mutually independent file systems, wherein the information recording medium has an authentication area

which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, result, and the non-authentication area and authentication area have plural areas respectively, and

the area setting method ~~includes~~ comprising:

storing ~~a size of area in the non-authentication area and information about the a ratio of a~~
size of the area in the non-authentication area to a size of the corresponding area in the authentication area, as a setting condition;

receiving, from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and the a size of each area in one of the non-authentication area and the authentication area;

setting a size of each area in the information recording medium based on the setting condition, according to the received command, the setting comprising:

determining the size of each area of the non-authentication area and the authentication area on the basis of the received size of each area and the ratio; and

setting the size of each area of the information recording medium on the basis of the received ~~value~~ size and determined ~~value~~ size.

28. (Currently Amended) ~~The~~ An area setting method of an information recording medium according to ~~claim 23, having plural areas storing data, which are managed by mutually independent file systems~~, wherein the information recording medium has an authentication area which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the

authentication, ~~result~~, and the non-authentication area and authentication area have plural areas respectively, and

the area setting method ~~includes~~: comprising:

receiving from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and the a size of each area in one of the non-authentication area and the authentication area;

setting a size of each area in the information recording medium based on a predetermined setting condition, according to the received command, the setting comprising:

calculating a composition ratio of each area ~~to~~ of the non-authentication area or the authentication area ~~from~~ based on the received size of each area;

determining ~~the a~~ size of each area in ~~the an~~ other of the non-authentication area and the authentication area on the basis of the calculated composition ratio, and

setting the size of each area of the information recording medium on the basis of the received ~~value~~ size and determined ~~value~~: size.

29. (Currently Amended) The An area setting method according to claim 23, of an information recording medium having plural areas storing data, which are managed by mutually independent file systems, wherein the information recording medium has an authentication area which allows access by the accessing device only when authentication is successful, and a non-authentication area which allows access by the accessing device regardless of a result of the authentication, result, and stores plural combinations of ~~each area-size~~ sizes of areas in the non-authentication area and the authentication area,

the area setting method ~~includes~~: comprising:

receiving, from outside of the information recording medium, a command for requesting setting of an area size of the information recording medium and specific information for selecting one combination from the plural combinations,

setting a size of each area in the information recording medium based on a predetermined setting condition, according to the received command,

selecting the one combination from the stored plural combinations according to the received specific information, and

setting each area the size of each area in the information recording medium according to the selected combination.

30. (Canceled).

31. (Currently Amended) The area setting method according to claim 23, 26 wherein only discrete values are allowed as the size of each area to be set.

32. (Currently Amended) The area setting method according to claim 23, 26 wherein the size of each area in the information recording medium is set to be larger than the a total size of bad inaccessible blocks, in which the ~~number~~ total size of bad inaccessible blocks are calculated from ~~a good~~ an accessible block rate and an entire size of the information recording medium or a size of each area of the information recording medium.